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EXAMINER
CHANG, JULIAN

ART UNIT	PAPER NUMBER
2452	

NOTIFICATION DATE	DELIVERY MODE
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

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		Application No.	Applicant(s)
Office Action Summary		10/654,771	MILLIKEN ET AL.
		Examiner	Art Unit	
		JULIAN CHANG	2452	

-- *The MAILING DATE of this communication appears on the cover sheet with the correspondence address* --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
  Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1) ☒ Responsive to communication(s) filed on <u>01 September 2009</u>.

2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.

3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4) ☒ Claim(s) <u>1-30 and 67-133</u> is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5) ☐ Claim(s) _____ is/are allowed.

6) ☒ Claim(s) <u>1-17,19-30 and 67-133</u> is/are rejected.

7) ☐ Claim(s) _____ is/are objected to.

8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9) ☐ The specification is objected to by the Examiner.

10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a) ☐ All b) ☐ Some * c) ☐ None of:

1. ☐ Certified copies of the priority documents have been received.

2. ☐ Certified copies of the priority documents have been received in Application No. _____.

3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)

2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3) ☒ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____.

4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.

5) ☐ Notice of Informal Patent Application

6) ☐ Other: _____.

DETAILED ACTION

1.   This Office action is responsive to communication filed on 09/01/09. Claims 1-

30, and 67-133 are pending. Claims 1-17, 19-30, and 67-133 are rejected.

Information Disclosure Statement

2.   The information disclosure statement filed 09/01/09 fails to comply with the

provisions of 37 CFR 1.97, 1.98 and MPEP § 609 because the references do not exist.

Applicant is reminded that pre-grant publication numbers include a four-digit year

followed by a *seven-digit* number. It has been placed in the application file, but the

information referred to therein has not been considered as to the merits. Additionally,

U.S. Pat. No. 3,956,615 was not available because the patent document has been

"WITHDRAWN". Applicant is advised that the date of any re-submission of any item of

information contained in this information disclosure statement or the submission of any

missing element(s) will be the date of submission for purposes of determining

compliance with the requirements based on the time of filing the statement, including all

certification requirements for statements under 37 CFR 1.97(e). See MPEP

§ 609.05(a).

Claim Rejections - 35 USC § 101

3.   35 U.S.C. 101 reads as follows:

> Whoever invents or discovers any new and useful process, machine, manufacture, or composition of
> matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the
> conditions and requirements of this title.

4.   Claims 70-133 are rejected under 35 U.S.C. 101 because the claimed invention
is directed to non-statutory subject matter.

5.   Claims 70-101 are drawn to a "computer program product embodied on a
tangible computer readable medium". The specification is silent regarding the meaning
of the term "tangible computer readable medium". Thus, applying the broadest
reasonable interpretation in light of the specification and taking into account the
meaning of the words in their ordinary usage as they would be understood by one of
ordinary skill in the art (MPEP § 2111), the claim as a whole covers both transitory and
non-transitory media. A computer program product is considered to be functional
descriptive material, which is statutory only if *recorded* on non-transitory computer-
readable medium. MPEP 2106.01.

6.   Regarding claims 102-133, the "system" is not a process, machine, manufacture,
or composition of matter. The claimed "logics" are non-structural limitations, and in light
of the specification these are disclosed as being software (e.g., ¶ [0101]). Therefore, the
claimed subject matter as a whole fails to fall within the four statutory categories of
invention.

Claim Rejections - 35 USC § 112

7.   The following is a quotation of the first paragraph of 35 U.S.C. 112:

> The specification shall contain a written description of the invention, and of the manner and process of
> making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the
> art to which it pertains, or with which it is most nearly connected, to make and use the same and shall
> set forth the best mode contemplated by the inventor of carrying out his invention.

8.   Claims 22, 91, and 123 are rejected under 35 U.S.C. 112, first paragraph, as

failing to comply with the written description requirement. The claim(s) contains subject

matter which was not described in the specification in such a way as to reasonably

convey to one skilled in the relevant art that the inventor(s), at the time the application

was filed, had possession of the claimed invention. The original disclosure disclosed

that e-mail from legitimate mailing lists may be passed through by matching hash values

generated based on a "From:" header field (¶ [0060], [0061]). Due to amendments to

claims 1, 70, and 102, the "generated hash value" of claims 22, 91, and 123 are based

on portions of the body of the e-mail message. Since the original disclosure did not

support matching hash values of legitimate mailing lists based on the body of the e-mail

message, the current claims 22, 91, and 123 are considered to be new matter.

Claim Rejections - 35 USC § 103

9.   The text of those sections of Title 35, U.S. Code not included in this action can

be found in a prior Office action.

10.   Claims 1-3, 5, 11-15, 17, 22-26, 28, 67-72, 74, 80-84, 86, 91-95, 97, 99-104, 106,

107, 112-116, 118, 123-127, 129, and 131-133 are rejected under 35 U.S.C. 103(a) as

being unpatentable over U.S. Pat. No. 6,460,050 ("Pace"), and further in view of U.S.

Pub. No. 2002/0199095 ("Bandini"), and U.S. Pub. No. 2004/0221062 ("Starbuck").

11.   Bandini and Starbuck are intervening references. After reviewing applicant's

priority documents, it has been determined that the priority documents do not support

the relevant claim limitations with a sufficient date to overcome the intervening

references.

12.   Regarding claims 1, 70, and 102, Pace teaches a method, a computer program

product implementing said method, and a system implementing said method, said

method comprising:

        receiving a plurality of e-mail messages (Fig. 2, Col. 3, lines 32-58); and

        generating hash values, as generated hash values, based a plurality of portions

of each message body of the plurality of e-mail messages ('digital ID...may be..multiple

hashes', 'hash may be of...portions of the body', Col. 4, lines 1-14).

        Pace fails to teach counting a number of the generated hash values

corresponding to the message body associated with one of the plurality of e-mail

messages that match the hash values corresponding to the message body associated

with prior e-mail messages; and utilizing a settable score-related threshold, determining

that one of the plurality of e-mail messages is a potentially unwanted e-mail message,

the determination being based, at least in part, on the number of generated hash values

corresponding to the message body associated with one of the e-mail messages that

match the hash values corresponding to the message body associated with the prior

email messages.

Bandini teaches counting ('running comparison score', ¶ [0023]) a number of the generated hash values corresponding to the message body ('hash computation result based on the message body, or portions of the message body', ¶ [0025]) associated with one of the plurality of e-mail messages that match the hash values corresponding to the message body associated with prior e-mail messages (¶ [0038]); and utilizing a settable score-related threshold (¶ [0021]), determining that one of the plurality of e-mail messages is a potentially unwanted e-mail message, the determination being based, at least in part, on the number of generated hash values corresponding to the message body associated with one of the e-mail messages that match the hash values corresponding to the message body associated with the prior email messages (Fig. 3). It would have been obvious to one of ordinary skill in the art at the time of applicant's invention to performing the steps of counting, and determining as taught by Bandini in order to effectively reduce the amount of SPAM received by a user.

Pace-Bandini fails to teach processing e-mail messages by removing HTML comments and HTML tags from the e-mail messages, and performing hashing based on the processed e-mail messages. Starbuck teaches processing e-mail messages by removing HTML comments and HTML tags from the e-mail messages, and performing hashing based on the processed e-mail messages (¶ [0007], [0009], [0048]). It would have been obvious to one of ordinary skill in the art at the time of applicant's invention to removing HTML from e-mail messages prior to hashing as taught by Starbuck in order to prevent HTML comments from circumventing SPAM filters.

13.   Regarding claim 2, 71, and 103, Pace-Bandini-Starbuck teaches the invention

substantially as claimed and described in claims 1, 70, and 102 above, including

performing a plurality of hashes on a plurality of variable-sized blocks of a main text of

the plurality of e-mail messages (Pace: 'all of the body or portions of the body', Col. 4,

lines 1-14). Since the main texts of messages are not all the same length, the block

(i.e., body) is variably-sized.

14.   Regarding claim 3, 72, and 104, Pace-Bandini-Starbuck teaches the invention

substantially as claimed and described in claims 1, 70, and 102 above, including

performing a plurality of hashes on a plurality of fixed-sized blocks of a subject line

(Pace: 'some number of characters of the subject line', Col. 4, lines 1-14), but fails to

teach doing so for fixed-sized blocks of the main text.

        In KSR Int'l. Co. v. Teleflex Inc., the Court recognized that "if a technique has

been used to improve one device, and a person of ordinary skill in the art would

recognize that it would improve similar devices in the same way, using the technique is

obvious unless its actual application is beyond his or her skill". 127 S.Ct 1727, 1740

(2007). In the instant case, one of ordinary skill would recognize that SPAM messages

are modified slightly in order to avoid exact matching by SPAM filters. It would have

been obvious to one of ordinary skill in the art at the time of applicant's invention to

apply the technique taught in Pace to fixed-sized blocks of main text in order to make it

harder for SPAM senders to circumvent SPAM filters

15.   Regarding claim 5, 74, and106, Pace-Bandini-Starbuck teaches the invention

substantially as claimed and described in claims 1, 70, and 102 above, including

performing a plurality of hashes on a main text of the plurality of e-mail messages using

a same hash function (Pace: 'MD5', Col. 4, lines 1-14).

16.   Regarding claim 11, 80, and 112, Pace-Bandini-Starbuck teaches the invention

substantially as claimed and described in claims 1, 70, and 102 above, including

comparing the generated hash values to hash values corresponding to known unwanted

e-mails (Pace: Col. 6, lines 1-18).

17.   Regarding claim 12, 81, and 113, Pace-Bandini-Starbuck teaches the invention

substantially as claimed and described in claim 11, 80, and 112 above, including that

known unwanted e-mails include at least one of e-mails containing a virus, e-mails

containing a worm, and unsolicited commercial e-mails (Pace: 'spam', Col. 6, lines 1-

18).

18.   Regarding claims 13, 82, and 114, Pace teaches the invention substantially as

claimed and described in claims 1, 70, and 102 above, including hashing at least one of

a main text and an attachment to generate one or more first hash values (Pace: 'all of

the body or portions of the body', Col. 4, lines 1-14), and hashing a concatenation of first

and second header fields to generate a second hash value (Pace: Col. 4, lines 1-14;

Bandini: para. [0026]).

19.   Regarding claims 14, 83, and 115, Pace-Bandini-Starbuck teaches the invention

substantially as claimed and described in claims 13, 82, and 114 above, including a

From header field and a To header field (Bandini: para. [0026]).

20.   Regarding claims 15, 84, and 116, Pace-Bandini-Starbuck teaches the invention

substantially as claimed and described in claims 13, 82, and 114 above, including

generating a first and second suspicion count (Bandini: Fig. 3, step 66 compares

various message attributes to data in database (i.e., previous hash values)).

21.   Regarding claim 17, 86, and 118, Pace-Bandini-Starbuck teaches the invention

substantially as claimed and described in claims 1, 70, and 102 above, including taking

remedial action when the one of the plurality of e-mail messages is a potentially

unwanted e-mail message, the taking remedial action including at least one of:

discarding the one of the plurality of e-mail messages, bouncing the one of the plurality

of e-mail messages, marking the one of the plurality of e-mail messages with a warning,

subjecting the one of the plurality of e-mail messages to a virus or worm detection

process, creating a notification message, and generating a suspicion score for the one

of the plurality of e-mail messages and using the suspicion score to identify further

processing for the one of the plurality of e-mail messages (Pace: 'subject line may be

appended to indicate that the e-mail is "spam", Col. 5, lines 41-54).

22.   Regarding claim 22, 91, and 123, Pace-Bandini-Starbuck teaches the invention substantially as claimed and described in claims 1, 70, and 102 above, including comparing the generated hash values to known legitimate mailing lists; and passing the plurality of e-mail messages without further examination when the generated hash values match one or more of the known legitimate mailing lists (Pace: 'exceptions', Col. 6, lines 18-34).

23.   Regarding claim 23, 92, and 124, Pace-Bandini-Starbuck teaches the invention substantially as claimed and described in claim 22, 91, and 123 above, including determining whether the plurality of e-mail messages originated from the known legitimate mailing lists (Pace: Col. 6, lines 18-34).

24.   Regarding claims 24, 93, and 125, Pace-Bandini-Starbuck teaches the invention substantially as claimed and described in claims 1, 70, and 102 above, including hashing a main text to generate a first hash value (Pace: 'all of the body or portions of the body', Col. 4, lines 1-14), and hashing sender-related header fields (Bandini: 'sender address', para. [0026]).

25.   Regarding claims 25, 94, and 126, Pace-Bandini-Starbuck teaches the invention substantially as claimed and described in claims 24, 93, and 125 above, including that a sender-related header fields include at least one of a From header field, a Sender header field, and a Reply-To header field (Bandini: para. [0026]).

26.   Regarding claims 26, 95, and 127, Pace-Bandini-Starbuck teaches the invention
substantially as claimed and described in claims 24, 93, and 125 above, including
generating a first and second suspicion count (Bandini: Fig. 3, step 66 compares
various message attributes to data in database (i.e., previous hash values)).

27.   Regarding claim 28, 97, and 129, Pace-Bandini-Starbuck teaches the invention
substantially as claimed and described in claims 1, 70, and 102 above, including
hashing a main text of the plurality of e-mail messages to generate a main text hash
(Pace: 'all of the body or portions of the body', Col. 4, lines 1-14), and hashing at least
one header field of the plurality of e-mail messages to generate at least one header
hash (Pace: 'header', Col. 4, lines 1-14).

28.   Regarding claims 67, 99, and 131, Pace-Bandini-Starbuck teaches the invention
substantially as claimed and described in claims 1, 70, and 102 above, including
processing e-mail messages before generating hash values (Starbuck: ¶ [0009]).

29.   Regarding claims 68, 100, and 132, Pace-Bandini-Starbuck teaches the
invention substantially as claimed and described in claims 1, 70, and 102 above,
including processing e-mail messages in parallel with generating hash values (Starbuck:
¶ [0009], 'concurrently', ¶ [0025]).

30.   Regarding claims 69, 101, and 133, Pace-Bandini-Starbuck teaches the
invention substantially as claimed and described in claims 1, 70, and 102 above,
including that the portions of each message body of the plurality of e-mail messages
that have been processed includes blocks (Pace: 'portions of the body', Col. 4, lines 1-
14).

31.   Claims 4, 73, and 105 are rejected under 35 U.S.C. 103(a) as being
unpatentable over Pace-Bandini-Starbuck as applied to claims 1, 70, and 102 above,
and further in view of U.S. Pat. No. 6,169,969 ("Cohen").

32.   Regarding claims 4, 73, and 105, Pace-Bandini-Starbuck teaches the invention
substantially as claimed and described in claims 1, 70, 102 above, but fails to teach
performing a plurality of hashes on a main text of the plurality of e-mail messages using
a plurality of different hash functions.

        Cohen discloses employing multiple hash functions (Col. 2, lines 1-21)
(describing Bloom). It would have been obvious to one of ordinary skill in the art at the
time of applicant's invention to employ multiple hash functions as disclosed in Cohen in
order to improve false alarm rates.

33.   Claims 6, 75, and 107 are rejected under 35 U.S.C. 103(a) as being
unpatentable over Pace-Bandini-Starbuck as applied to claims 1, 70, and 102 above,

and further in view of U.S. Pub. No. 2003/0167402 ("Stolfo"), and U.S. 2002/0152399

("Smith").

34.   Stolfo and Smith are intervening references that qualify as prior art because the

Office was unable to find in applicant's priority documents support for the claim

limitations for which Stolfo and Smith are relied upon.

35.   Regarding claims 6, 75, and 107, Pace-Bandini-Starbuck teaches the invention

substantially as claimed and described in claims 1, 70, and 102 above, but fails to

teach performing hashes on attachments.

    Stolfo teaches performing hashes on attachments ('MD5', para. [0045]). It would

have been obvious to one of ordinary skill in the art at the time of applicant's invention

to perform hashes on attachments as taught by Stolfo in order to detect malicious

attachments.

    Pace-Bandini-Starbuck-Stolfo fails to teach attempting to decompress an

attachment prior to hashing. Smith teaches decompressing an attachment prior to

determining whether the attachment contains an exploit (Fig. 6; para. [0071]). It would

have been obvious to one of ordinary skill in the art at the time of applicant's invention

to decompress an attachment prior to scanning as taught by Smith in order to find

hidden exploits in an attachment.

36.   Claims 7, 8, 10, 76, 77, 79, 108, 109, and 111 are rejected under 35

U.S.C. 103(a) as being unpatentable over Pace-Bandini-Starbuck as applied to claims

1, 70, and 102 above, and further in view of Stolfo.

37.   Regarding claims 7, 76, and 108, Pace-Bandini-Starbuck teaches the invention

substantially as claimed and described in claims 1, 70, and 102 above, including

performing a plurality of hashes on a plurality of variable-sized blocks of information

(Pace: Col. 4, lines 1-14), but fails to teach performing hashes on attachments.

        Stolfo teaches performing hashes on attachments (para. [0045]). It would have

been obvious to one of ordinary skill in the art at the time of applicant's invention to

perform hashes on attachments as taught by Stolfo in order to detect malicious

attachments.

38.   Regarding claims 8, 77, and 109, Pace-Bandini-Starbuck teaches the invention

substantially as claimed and described in claims 1, 70, and 102 above, including

performing a plurality of hashes on a plurality of fixed-sized blocks of information (Pace:

Col. 4, lines 1-14), but fails to teach performing hashes on attachments.

        Stolfo teaches performing hashes on attachments (para. [0045]). It would have

been obvious to one of ordinary skill in the art at the time of applicant's invention to

perform hashes on attachments as taught by Stolfo in order to detect malicious

attachments.

39.   Regarding claims 10, 79, and 111, Pace-Bandini-Starbuck teaches the invention

substantially as claimed and described in claims 1, 70 and 102 above, but fails to teach

performing hashes on attachments.

        Stolfo teaches performing hashes on attachments using a single hash function

('MD5', para. [0045]). It would have been obvious to one of ordinary skill in the art at the

time of applicant's invention to perform hashes on attachments as taught by Stolfo in

order to detect malicious attachments.

40.   Claims 9, 78, and 110 are rejected under 35 U.S.C. 103(a) as being

unpatentable over Pace-Bandini-Starbuck as applied to claims 1, 70 and 102 above,

and further in view of Stolfo and Cohen.

41.   Regarding claims 9, 78, and 110, Pace-Bandini-Starbuck teaches the invention

substantially as claimed and described in claims 1, 70, and 102 above, but fails to teach

performing hashes on attachments.

        Stolfo teaches performing hashes on attachments (para. [0045]). It would have

been obvious to one of ordinary skill in the art at the time of applicant's invention to

perform hashes on attachments as taught by Stolfo in order to detect malicious

attachments.

        Pace-Bandini-Starbuck-Stolfo fails to teach performing a plurality of hashes using

a plurality of different hash functions. Cohen discloses employing multiple hash

functions (Col. 2, lines 1-21) (describing Bloom). It would have been obvious to one of

ordinary skill in the art at the time of applicant's invention to employ multiple hash

functions as disclosed in Cohen in order to improve false alarm rates.

42.   Claims 16, 27, 85, 96, 117, and 128 are rejected under 35 U.S.C. 103(a) as

being unpatentable over Pace-Bandini-Starbuck as applied to claims 15, 26, 84, 95,

116, and 127 above, and further in view of U.S. Pat. No. 6,985,923 ("Bates").

43.   Regarding claims 16, 27, 85, 96, 117, and 128, Pace-Bandini-Starbuck teaches

the invention substantially as claimed and described in claims 15, 26, 84, 95, 116, and

127 above, but fails to teach determining that an email message is potentially unwanted

when the main text matches a substantially higher number of emails than the header

hash. In other words, an email is unwanted when the same message is received from

different addresses.

       Bates teaches determining that a message is unwanted when the same message

is received from different senders (Col. 1, lines 22-30). It would have been obvious to

one of ordinary skill in the art at the time of applicant's invention to determine messages

to be unwanted when the same message is received from different senders as taught

by Bates in order to avoid duplicate messages.

44.   Claims 19-21, 88-90, and 120-122 are rejected under 35 U.S.C. 103(a) as being

unpatentable over Pace-Bandini-Starbuck as applied to claims 1, 70, and 102 above,

and further in view of Schiavone.

45.   Regarding claims 19, 88, and 120, Pace-Bandini-Starbuck teaches the invention

substantially as claimed and described in claims 1, 70, and 102 above, but fails to teach

generating and comparing hash values as a message is being received.

Schiavone teaches performing hashing in real-time as the message is being

received (para. [0026]). It would have been obvious to one of ordinary skill in the art at

the time of applicant's invention to perform hashing in real-time as taught by Schiavone

in order to bouncing messages in real-time.

46.   Regarding claims 20, 89, and 121, Pace-Bandini-Starbuck-Schiavone teaches

the invention substantially as claimed and described in claims 19, 88, and 120,

including:

generating a suspicion score for the plurality of e-mail messages based on a

result of the counting of the number of the generated hash values corresponding to the

message body associated with the plurality of e-mail messages that match the hash

values corresponding to the message body associated with prior e-mail messages

(Bandini: Fig. 3; para. [0023]); and

taking remedial action when the suspicion score of an e-mail message of the

plurality of e-mail messages is above a threshold (Bandini: Fig. 3; para. [0023]), the

taking remedial action including rejecting the e-mail message (Bandini: Fig. 2, Step 60).

47.   Regarding claims 21, 90, and 120, Pace-Bandini-Starbuck-Schiavone teaches

the invention substantially as claimed and described in claims 20, 89, and 121, including

that rejecting occurs before the e-mail message is completely received (Schiavone:

para. [0026]).

48.   Claims 29, 98, and 130 are rejected under 35 U.S.C. 103(a) as being

unpatentable over Pace-Bandini-Starbuck as applied to claims 28, 97, and 129 above,

and further in view of Bates.

49.   Regarding claims 29, 98, and 130, Pace-Bandini-Starbuck teaches the invention

substantially as claimed and described in claims 28, 97, and 129 above, but fails to

teach determining that an email message is potentially unwanted when the main text

hash matches a substantially higher number of emails than the header hash. In other

words, an email is unwanted when the same message is received from different

addresses.

        Bates teaches determining that a message is unwanted when the same message

is received from different senders (Col. 1, lines 22-30). It would have been obvious to

one of ordinary skill in the art at the time of applicant's invention to determine messages

to be unwanted when the same message is received from different senders as taught

by Bates in order to avoid duplicate messages.

Allowable Subject Matter

50.   Claim 18 is objected to as being dependent upon a rejected base claim, but
would be allowable if rewritten in independent form including all of the limitations of the
base claim and any intervening claims.

51.   The following is a statement of reasons for the indication of allowable subject
matter: The prior art of record fails to teach deleting the e-mail with the highest
suspicion score (e.g., most likely to be SPAM) when an incoming email exceeds a mail
quota.

Response to Arguments

52.   Applicant's arguments, see Remarks 30, filed 09/01/09, with respect to claim 18
have been fully considered and are persuasive. The rejection of claim 18 has been
withdrawn.

53.   Applicant's remaining arguments filed 09/01/09 have been fully considered but
they are not persuasive.

        a.   With regard to claim 22, applicant argues that Pace fails to teach passing

        e-mail messages without further examination when the generated hash values

        match one or more of the known legitimate mailing lists. (Remarks 27-29). Pace

        teaches hashing various portions of an e-mail message (Col. 3, lines 33-49), and

        also teaches passing e-mail from known legitimate mailing lists (Col. 6, lines 18-

        34). It would have been obvious to one of ordinary skill in the art at the time of

applicant's invention to match the source of the e-mails from the generated
hashes.

b.   With regard to claim 15, applicant argues that Pace fails to teach
determining a first and second suspicion count (Remarks 29). In response to
applicant's arguments against the references individually, one cannot show
nonobviousness by attacking references individually where the rejections are
based on combinations of references. See *In re Keller*, 642 F.2d 413, 208
USPQ 871 (CCPA 1981); *In re Merck & Co.*, 800 F.2d 1091, 231 USPQ 375
(Fed. Cir. 1986). Applicant's argument is not persuasive because Bandini
teaches generating a first and second suspicion count (Fig. 3, step 66 compares
various message attributes to data in database (i.e., previous hash values)).

c.   With regard to claim 16, applicant argues that Bates fails to teach
"determining that one of the plurality of messages is a potentially unwanted email
message when the first suspicion count is higher than the second suspicion
count". (Remarks 31). Applicant's specification discloses that if a main text count
is significantly higher than the from/to suspicion count, the message is more
suspicious (¶ [0074]). In view of applicant's disclosure, Bates reasonably teaches
to one of skill in the art that identical messages received from multiple different
sources are likely to be unwanted.

d.   Any arguments not expressly addressed are moot in view of the new
ground(s) of rejection presented above.

Conclusion

54.   Applicant's amendment necessitated the new ground(s) of rejection presented in
this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP
§ 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37
CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE
MONTHS from the mailing date of this action. In the event a first reply is filed within
TWO MONTHS of the mailing date of this final action and the advisory action is not
mailed until after the end of the THREE-MONTH shortened statutory period, then the
shortened statutory period will expire on the date the advisory action is mailed, and any
extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of
the advisory action. In no event, however, will the statutory period for reply expire later
than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the
examiner should be directed to JULIAN CHANG whose telephone number is (571)272-
8631. The examiner can normally be reached on Monday thru Friday 9AM to 5PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's
supervisor, Thu Nguyen can be reached on (571) 272-6967. The fax phone number for
the organization where this application or proceeding is assigned is 571-273-8300.

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/J. C./

Examiner, Art Unit 2452

/DOHM CHANKONG/
Primary Examiner, Art Unit 2452